

1. A grass collecting assembly for a lawn mower, the mower having a rotating blade, a deck enclosing the blade, and an outlet port in the deck, the collecting assembly comprising: a first conduit having a first end connecting with the deck outlet port and receiving air flow and entrained clips, debris and dust as the blade mows the grass; a blower communicating with the first conduit to induce greater air flow in the first conduit; a hopper having an exterior and an interior and an input opening formed therein receiving the first conduit second end for movement of air and entrained materials through the hopper interior until most of the entrained materials are dropped from the air flow that continues back toward the hopper input opening; a hopper interior wall forming a chamber within the hopper interior and having a opening to cooperatively receive the flowing air and the remaining entrained materials carried thereby; a baffle system positioned within the formed chamber and selectively located to intercept air flow and remove additional entrained materials; an output opening formed within the hopper exterior and interior wall of a second conduit, the conduit other end connecting with the intake of the blower.

2. A collecting assembly as claimed in claim 1 wherein the hopper has sides, two ends with interior walls and a door, one of the ends having an input opening formed therein receiving the first conduit second end for movement of air, clippings, debris and dust through the hopper and against the interior wall of the other hopper end where the majority of the entrained clippings, debris and dust

collide with the other end interior wall and fall to the lowermost side while air flow and remaining entrained materials are reversed by collision with the other end interior wall and continue back toward the interior wall of the first end, the baffle system being made up of a plurality of flow intercepting individual baffles selectively positioned to intercept air flow, the output opening formed in the hopper first end and within the formed chamber and connecting with one end of a second conduit, the conduit other end connecting with the intake of the blower so that relatively clean air goes back into the first conduit to continue the collection operation.

3. A method of collecting grass clippings, debris and dust caused by mowing grass with a lawn mower comprising the steps of: collecting cut grass and associated entrained materials as mowing takes place; directing the cut grass and entrained materials along a predetermined path of travel; inducing increased air flow as the cut grass and entrained materials continue along the predetermined path of travel; directing the air flow and entrained materials into a collecting hopper; moving the air flow and entrained materials against a hopper interior wall so that the majority of the entrained materials collide with the interior wall and fall to the lowermost surface of the hopper and the air flow rebounds from the interior hopper surface and moves back toward the entrance of the hopper interior; subjecting the air flow and the remaining entrained materials to a baffle system having selectively positioned individual baffles to further reduce the quantity of entrained materials; and moving the air flow and remaining entrained

materials out of the hopper and back to the location where increased induced air flow is occurring and thereby continue the collection operation.

4. The grass collecting assembly as claimed in claim 1 further comprising: a conduit insert positioned inside the first conduit designed to enhance and efficiently control air and debris flow within the first conduit.

5. The grass collecting assembly as claimed in claim 2 further comprising: a conduit insert positioned inside the first conduit designed to enhance and efficiently control air and entrained debris flow within the first conduit.